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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,005	07/08/2003	Kota Uchida	03500.017380.	6277
5514	7590	07/23/2004	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			COLILLA, DANIEL JAMES	
			ART UNIT	PAPER NUMBER
			2854	

DATE MAILED: 07/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/614,005

Applicant(s)

UCHIDA ET AL.

Examiner

Dan Colilla

Art Unit

2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 9 and 10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-8 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 20030708; 20030804; 20031126; 20040519
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of claims 1-8 in the reply filed on 5/7/04 is acknowledged.

### ***Claim Objections***

2. Claim 8 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Applicant has not recited any structure in this claim, instead applicant has recited functional language of how the previously recited structure is to be used. Since the claim is an apparatus claim, the claim must be limited by reciting further structural limitations. See MPEP § 2114.

3. Claim 2 is objected to because of the following informalities: in claim 2, line 4, phrase "a site of a chassis" is unclear. Perhaps applicant is intending to recite some type of structure on the chassis? Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2854

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3 and 6-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Hirano et al. (JP 6-135088).

With respect to claim 1, Hirano et al. discloses a recording apparatus including a carriage 45, a guide shaft 41 and a guide shaft lifting and lowering mechanism as shown in Figures 4-5 of Hirano et al. Figure 5 of Hirano et al. shows 4 stages for changing a height of the guide shaft as mentioned in paragraph [0011] of the machine translation.

With respect to claim 2, Figures 4 and 8 of Hirano et al. show the end of the guide shaft 41 positioned in a slot 1H of the side wall 1S as mentioned in paragraph [0011] of Hirano et al.

With respect to claim 3, Hirano et al. discloses a cam 61 as part of the guide shaft lifting and lowering mechanism. Also disclosed is a cam abutment portion 41F as shown in Figure 8 of Hirano et al.

With respect to claim 6, the height of the guide shaft 41 is controlled by control means 11,12 rotating the position of the cam 61 with motor 60M as mentioned in the “Constitution” portion of the English abstract.

With respect to claim 7, Figure 2 of Hirano et al. shows transport roller 52 attached to side walls 1S as mentioned in paragraph [0010] of the machine translation of Hirano et al.

With respect to claim 8, applicant has not recited any further structure in this claim, therefore it is rejected along with its parent claim since all functions must be able to be carried out by the previously recited structure.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tachibana et al. (JP 5-092638) in view of Hirano et al. (JP 6-135088).

With respect to claim 1, Tachibana et al. discloses the claimed recording apparatus except for the three or more stages. Tachibana discloses a recording apparatus including a carriage 4, a guide shaft 6 and a guide shaft lifting and lowering mechanism 5a,7,8. Hirano et al. teaches stages for changing a height of the guide shaft as mentioned in paragraph [0011] of the machine translation of Hirano et al. (see Figure 5 of Hirano et al.). It would have been obvious to combine the teaching of Hirano et al. with the recording apparatus disclosed by Tachibana et al. for the advantage of providing the user with predetermined settings that indicate the distance between the printhead and the recording material.

With respect to claim 3, Tachibana et al. discloses that the guide shaft lifting and lowering mechanism includes a cam 7 and an abutment portion 8.

With respect to claim 4, Tachibana et al. discloses a cam 7 on each end of the guide shaft 6 as shown in Figure 2 of Tachibana et al.

*Allowable Subject Matter*

8. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter:

Claim 5 has been indicated as containing allowable subject matter primarily for the regulating portion that abuts against the guide shaft in the lowest position.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yagi and Yoshida are cited to show other examples of cams used to change a print gap.


11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Colilla whose telephone number is (571)272-2157. The examiner can normally be reached Mon.-Thur. between 7:30 am and 6:00 pm. Faxes regarding this application can be sent to (703)872 - 9306.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached at (571)272-2168. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

July 20, 2004



Daniel J. Colilla  
Primary Examiner  
Art Unit 2854